

What is claimed is:

1. A power supply for an implantable  
cardioverter-defibrillator for subcutaneous  
positioning between the third rib and the twelfth rib  
and using a lead system that does not directly  
contact a patient's heart or reside in the  
intrathorasic blood vessels and for providing anti-  
tachycardia pacing energy to the heart, the power  
supply comprising:

a capacitor subsystem for storing the anti-  
tachycardia pacing energy for delivery to the  
patient's heart; and

a battery subsystem electrically coupled to the  
capacitor subsystem for providing the anti-  
tachycardia pacing energy to the capacitor subsystem.

2. The power supply of claim 1, wherein the  
anti-tachycardia pacing energy comprises a biphasic  
waveform having a peak current that is approximately  
one milliamp to approximately 250 milliamps.

3. The power supply of claim 2, wherein the  
anti-tachycardia pacing energy comprises a biphasic

waveform having a peak current that is approximately one milliamp to approximately 50 milliamps.

4. The power supply of claim 2, wherein the  
5 anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 50 milliamps to approximately 100 milliamps.

10 5. The power supply of claim 2, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 100 milliamps to approximately 150 milliamps.

15 6. The power supply of claim 2, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 150 milliamps to approximately 200 milliamps.

20 7. The power supply of claim 2, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 200 milliamps to approximately 250 milliamps.

8. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 1 millisecond to approximately 40 milliseconds.

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9. The power supply of claim 8, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 1 millisecond to approximately 10 milliseconds.

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10. The power supply of claim 8, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 10 milliseconds to approximately 20 milliseconds.

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11. The power supply of claim 8, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 20 milliseconds to approximately 30 milliseconds.

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12. The power supply of claim 8, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 30 milliseconds to approximately 40 milliseconds.

13. The power supply of claim 1, wherein the  
anti-tachycardia pacing energy comprises a biphasic  
waveform further comprising a portion that is  
5 positive in polarity and a portion that is negative  
in polarity.

14. The power supply of claim 1, wherein the  
anti-tachycardia pacing energy comprises a biphasic  
10 waveform that is provided at a rate of approximately  
100 to approximately 350 stimuli/minute.

15. The power supply of claim 14, wherein the  
biphasic waveform is provided after a patient's heart  
15 rate is equal to or greater than approximately 100  
beats/minute.

16. The power supply of claim 15, wherein the  
biphasic waveform is provided after a patient's heart  
20 rate is associated with a monomorphic ECG pattern.

17. The power supply of claim 1, wherein the  
lead system comprises an electrode located proximate

the sternum and anterior portion of the patient's heart.

18. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises burst pacing.

19. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises ramp pacing.

20. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately one milliamp to approximately 250 milliamps.

21. The power supply of claim 20, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately one milliamp to approximately 50 milliamps.

22. The power supply of claim 20, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 50 milliamps to approximately 100 milliamps.

23. The power supply of claim 20, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 100 milliamps to approximately 150 milliamps.

24. The power supply of claim 20, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 150 milliamps to approximately 200 milliamps.

25. The power supply of claim 20, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 200 milliamps to approximately 250 milliamps.

26. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 1 millisecond to approximately 40 milliseconds.

27. The power supply of claim 26, wherein the anti-tachycardia pacing energy comprises a monophasic

waveform having a pulse width that is approximately 1 millisecond to approximately 10 milliseconds.

5 28. The power supply of claim 26, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 10 milliseconds to approximately 20 milliseconds.

10 29. The power supply of claim 26, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 20 milliseconds to approximately 30 milliseconds.

15 30. The power supply of claim 26, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 30 milliseconds to approximately 40 milliseconds.

20 31. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises a monophasic waveform that is either positive or negative in polarity.

32. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises a monophasic waveform that is provided at a rate of approximately 100 to approximately 350 stimuli/minute.

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33. The power supply of claim 32, wherein the monophasic waveform is provided after a patient's heart rate is equal to or greater than approximately 100 beats/minute.

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34. The power supply of claim 33, wherein the monophasic waveform is provided after a patient's heart rate is associated with a monomorphic ECG pattern.

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35. The power supply of claim 1, wherein the lead system comprises an electrode located proximate the sternum and anterior portion of the patient's heart.

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36. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises burst pacing.



37. The power supply of claim 1, wherein the anti-tachycardia pacing energy comprises ramp pacing..

5 38. Current output system for an implantable cardioverter-defibrillator using a lead system that does not directly contact a patient's heart or reside in the intrathorasic blood vessels and for providing anti-tachycardia pacing energy to the heart, the  
10 power supply comprising:

an energy storage system for storing the anti-tachycardia pacing energy for delivery to the patient's heart; and

15 an energy source system electrically coupled to the capacitor subsystem for providing the anti-tachycardia pacing energy to the capacitor subsystem.

20 39. Current output system of claim 38, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately one milliamp to approximately 250 milliamps.

100-150-200-250-300-350-400-450-500-550-600-650-700-750-800-850-900-950-1000

40. Current output system of claim 39, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a peak current that is  
approximately one milliamp to approximately 50  
5 milliamps.

41. Current output system of claim 39, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a peak current that is  
10 approximately 50 milliamps to approximately 100  
milliamps.

42. Current output system of claim 39, wherein  
the anti-tachycardia pacing energy comprises a  
15 biphasic waveform having a peak current that is  
approximately 100 milliamps to approximately 150  
milliamps.

43. Current output system of claim 39, wherein  
20 the anti-tachycardia pacing energy comprises a  
biphasic waveform having a peak current that is  
approximately 150 milliamps to approximately 200  
milliamps.

44. Current output system of claim 39, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a peak current that is  
approximately 200 milliamps to approximately 250  
milliamps.

45. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a pulse width that is  
approximately 1 millisecond to approximately 40  
milliseconds.

46. Current output system of claim 45, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a pulse width that is  
approximately 1 millisecond to approximately 10  
milliseconds.

47. Current output system of claim 45, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a pulse width that is  
approximately 10 milliseconds to approximately 20  
milliseconds.

48. Current output system of claim 45, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a pulse width that is  
approximately 20 milliseconds to approximately 30  
milliseconds.

49. Current output system of claim 45, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform having a pulse width that is  
approximately 30 milliseconds to approximately 40  
milliseconds.

50. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform further comprising a portion that  
is positive in polarity and a portion that is  
negative in polarity.

51. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
biphasic waveform that is provided at a rate of  
approximately 100 to approximately 350  
stimuli/minute.

52. Current output system of claim 51, wherein  
the biphasic waveform is provided after a patient's  
heart rate is equal to or greater than approximately  
100 beats/minute.

53. The current output system of claim 52,  
wherein the biphasic waveform is provided after a  
patient's heart rate is associated with a monomorphic  
ECG pattern.

54. The current output system of claim 38,  
wherein the lead system comprises an electrode  
located proximate the sternum and anterior portion of  
the patient's heart.

55. The current output system of claim 38,  
wherein the anti-tachycardia pacing energy comprises  
burst pacing.

56. The current output system of claim 38,  
wherein the anti-tachycardia pacing energy comprises  
ramp pacing.

57. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a peak current that is  
approximately one milliamp to approximately 250  
5 milliamps.

58. Current output system of claim 57, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a peak current that is  
10 approximately one milliamp to approximately 50  
milliamps.

59. Current output system of claim 57, wherein  
the anti-tachycardia pacing energy comprises a  
15 monophasic waveform having a peak current that is  
approximately 50 milliamps to approximately 100  
milliamps.

60. Current output system of claim 57, wherein  
20 the anti-tachycardia pacing energy comprises a  
monophasic waveform having a peak current that is  
approximately 100 milliamps to approximately 150  
milliamps.

61. Current output system of claim 57, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a peak current that is  
approximately 150 milliamps to approximately 200  
milliamps.

62. Current output system of claim 57, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a peak current that is  
approximately 200 milliamps to approximately 250  
milliamps.

63. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a pulse width that is  
approximately 1 millisecond to approximately 40  
milliseconds.

64. Current output system of claim 63, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a pulse width that is  
approximately 1 millisecond to approximately 10  
milliseconds.

65. Current output system of claim 63, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a pulse width that is  
approximately 10 milliseconds to approximately 20  
milliseconds.

66. Current output system of claim 63, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a pulse width that is  
approximately 20 milliseconds to approximately 30  
milliseconds.

67. Current output system of claim 63, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform having a pulse width that is  
approximately 30 milliseconds to approximately 40  
milliseconds.

68. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform further comprising a positive  
voltage portion.



69. Current output system of claim 38, wherein  
the anti-tachycardia pacing energy comprises a  
monophasic waveform that is provided at a rate of  
approximately 100 to approximately 350  
5 stimuli/minute.

70. Current output system of claim 69, wherein  
the monophasic waveform is provided after a patient's  
heart rate is equal to or greater than approximately  
10 100 beats/minute.

71. The current output system of claim 70,  
wherein the monophasic waveform is provided after a  
patient's heart rate is associated with a monomorphic  
15 ECG pattern.

72. The current output system of claim 38,  
wherein the lead system comprises an electrode  
located proximate the sternum and anterior portion of  
20 the patient's heart.

73. The current output system of claim 38,  
wherein the anti-tachycardia pacing energy comprises  
burst pacing.

5           74. The current output system of claim 38,  
wherein the anti-tachycardia pacing energy comprises  
ramp pacing.

10           75. An implantable cardioverter-defibrillator  
for subcutaneous positioning between the third rib  
and the twelfth rib within a patient, the implantable  
cardioverter-defibrillator comprising:

          a housing having an electrically conductive  
surface on an outer surface of the housing;

15           a lead assembly electrically coupled to the  
housing and having an electrode, wherein the lead  
assembly does not directly contact the patient's  
heart or reside in the intrathorasic blood vessels;

          a capacitor subsystem located within the housing  
20           and electrically coupled to the electrically  
conductive surface and the electrode for storing  
anti-tachycardia pacing energy and for delivering the  
anti-tachycardia pacing energy to the patient's heart

through the electrically conductive surface and the electrode; and

a battery subsystem electrically coupled to the capacitor subsystem for providing the anti-tachycardia pacing energy to the capacitor subsystem.

76. The implantable cardioverter-defibrillator of claim 75, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately one milliamp to approximately 250 milliamps.

77. The implantable cardioverter-defibrillator of claim 76, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately one milliamp to approximately 50 milliamps.

78. The implantable cardioverter-defibrillator of claim 76, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 50 milliamps to approximately 100 milliamps.

79. The implantable cardioverter-defibrillator  
of claim 76, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a peak  
current that is approximately 100 milliamps to  
approximately 150 milliamps.

80. The implantable cardioverter-defibrillator  
of claim 76, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a peak  
current that is approximately 150 milliamps to  
approximately 200 milliamps.

81. The implantable cardioverter-defibrillator  
of claim 76, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a peak  
current that is approximately 200 milliamps to  
approximately 250 milliamps.

82. The implantable cardioverter-defibrillator  
of claim 76, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a pulse  
width that is approximately 1 millisecond to  
approximately 40 milliseconds.

83. The implantable cardioverter-defibrillator  
of claim 82, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a pulse  
width that is approximately 1 millisecond to  
approximately 10 milliseconds.

84. The implantable cardioverter-defibrillator  
of claim 82, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a pulse  
width that is approximately 10 milliseconds to  
approximately 20 milliseconds.

85. The implantable cardioverter-defibrillator  
of claim 82, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a pulse  
width that is approximately 20 milliseconds to  
approximately 30 milliseconds.

86. The implantable cardioverter-defibrillator  
of claim 82, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform having a pulse  
width that is approximately 30 milliseconds to  
approximately 40 milliseconds.

87. The implantable cardioverter-defibrillator  
of claim 75, wherein the anti-tachycardia pacing  
energy comprises a biphasic waveform further  
5 comprising a portion that is positive in polarity and  
a portion that is negative in polarity.

88. The implantable cardioverter-defibrillator  
of claim 75, wherein the anti-tachycardia pacing  
10 energy comprises a biphasic waveform that is provided  
at a rate of approximately 100 to approximately 350  
stimuli/minute.

89. The implantable cardioverter-defibrillator  
15 of claim 88, wherein the biphasic waveform is  
provided after a patient's heart rate is equal to or  
greater than approximately 100 beats/minute.

90. The implantable cardioverter-defibrillator  
20 of claim 89, wherein the monophasic waveform is  
provided after a patient's heart rate is associated  
with a monomorphic ECG pattern.

91. The implantable cardioverter-defibrillator of claim 75, wherein the lead system comprises an electrode located proximate the sternum and anterior portion of the patient's heart.

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92. The implantable cardioverter-defibrillator of claim 75, wherein the anti-tachycardia pacing energy comprises burst pacing.

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93. The implantable cardioverter-defibrillator of claim 75, wherein the anti-tachycardia pacing energy comprises ramp pacing.

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94. The implantable cardioverter-defibrillator of claim 75, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately one milliamp to approximately 250 milliamps.

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95. The implantable cardioverter-defibrillator of claim 94, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak

current that is approximately one milliamp to  
approximately 50 milliamps.

96. The implantable cardioverter-defibrillator  
of claim 94, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a peak  
current that is approximately 50 milliamps to  
approximately 100 milliamps.

97. The implantable cardioverter-defibrillator  
of claim 94, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a peak  
current that is approximately 100 milliamps to  
approximately 150 milliamps.

98. The implantable cardioverter-defibrillator  
of claim 94, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a peak  
current that is approximately 150 milliamps to  
approximately 200 milliamps.

99. The implantable cardioverter-defibrillator  
of claim 94, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a peak



current that is approximately 200 milliamps to  
approximately 250 milliamps.

100. The implantable cardioverter-defibrillator  
of claim 75, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a pulse  
width that is approximately 1 millisecond to  
approximately 40 milliseconds.

101. The implantable cardioverter-defibrillator  
of claim 100, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a pulse  
width that is approximately 1 millisecond to  
approximately 10 milliseconds.

102. The implantable cardioverter-defibrillator  
of claim 100, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a pulse  
width that is approximately 10 milliseconds to  
approximately 20 milliseconds.

103. The implantable cardioverter-defibrillator  
of claim 100, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a pulse

width that is approximately 20 milliseconds to  
approximately 30 milliseconds.

104. The implantable cardioverter-defibrillator  
of claim 100, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform having a pulse  
width that is approximately 30 milliseconds to  
approximately 40 milliseconds.

105. The implantable cardioverter-defibrillator  
of claim 75, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform that is either  
positive or negative in polarity.

106. The implantable cardioverter-defibrillator  
of claim 105, wherein the anti-tachycardia pacing  
energy comprises a monophasic waveform that is  
provided at a rate of approximately 100 to  
approximately 350 stimuli/minute.

107. The implantable cardioverter-defibrillator  
of claim 106, wherein the monophasic waveform is  
provided after a patient's heart rate is equal to or  
greater than approximately 100 beats/minute.

108. The implantable cardioverter-defibrillator  
of claim 107, wherein the monophasic waveform is  
provided after a patient's heart rate is associated  
with a monomorphic ECG pattern.

109. The implantable cardioverter-defibrillator  
of claim 75, wherein the lead system comprises an  
electrode located proximate the sternum and anterior  
portion of the patient's heart.

110. The implantable cardioverter-defibrillator  
of claim 75, wherein the anti-tachycardia pacing  
energy comprises burst pacing.

111. The implantable cardioverter-defibrillator  
of claim 75, wherein the anti-tachycardia pacing  
energy comprises ramp pacing.

112. A method for supplying power for an  
implantable cardioverter-defibrillator for  
subcutaneous positioning between the third rib and  
the twelfth rib and using a lead system that does not  
5 directly contact a patient's heart or reside in the  
intrathorasic blood vessels and for providing anti-  
tachycardia pacing energy to the heart, the method  
comprising:

generating anti-tachycardia pacing energy;  
10 storing the anti-tachycardia pacing energy; and  
delivering the anti-tachycardia pacing energy to  
the patient's heart.

113. The method of claim 112, wherein the anti-  
15 tachycardia pacing energy comprises a biphasic  
waveform having a peak current that is approximately  
one milliamp to approximately 250 milliamps.

114. The method of claim 113, wherein the anti-  
20 tachycardia pacing energy comprises a biphasic  
waveform having a peak current that is approximately  
one milliamp to approximately 50 milliamps.

115. The method of claim 113, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 50 milliamps to approximately 100 milliamps.

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116. The method of claim 113, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 100 milliamps to approximately 150 milliamps.

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117. The method of claim 113, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 150 milliamps to approximately 200 milliamps.

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118. The method of claim 113, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a peak current that is approximately 200 milliamps to approximately 250 milliamps.

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119. The method of claim 112, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 1 millisecond to approximately 40 milliseconds.

120. The method of claim 119, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 1 millisecond to approximately 10 milliseconds.

121. The method of claim 119, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 10 milliseconds to approximately 20 milliseconds.

122. The method of claim 119, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 20 milliseconds to approximately 30 milliseconds.

123. The method of claim 119, wherein the anti-tachycardia pacing energy comprises a biphasic waveform having a pulse width that is approximately 30 milliseconds to approximately 40 milliseconds.

124. The method of claim 112, wherein the anti-tachycardia pacing energy comprises a biphasic waveform further comprising a portion that is

positive in polarity and a portion that is negative  
in polarity.

125. The method of claim 112, wherein the anti-  
tachycardia pacing energy comprises a biphasic  
waveform that is provided at a rate of approximately  
100 to approximately 350 stimuli/minute.

126. The method of claim 125, wherein the  
biphasic waveform is provided after a patient's heart  
rate is equal to or greater than approximately 100  
beats/minute.

127. The method of claim 126, wherein the  
biphasic waveform is provided after a patient's heart  
rate is associated with a monomorphic ECG pattern.

128. The method of claim 112, wherein the lead  
system comprises an electrode located proximate the  
sternum and anterior portion of the patient's heart.

129. The method of claim 112, wherein the anti-  
tachycardia pacing energy comprises burst pacing.

130. The method of claim 112, wherein the anti-tachycardia pacing energy comprises ramp pacing.

131. The method of claim 112, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately one milliamp to approximately 250 milliamps.

132. The method of claim 131, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately one milliamp to approximately 50 milliamps.

133. The method of claim 131, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 50 milliamps to approximately 100 milliamps.

134. The method of claim 131, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 100 milliamps to approximately 150 milliamps.



135. The method of claim 131, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 150 milliamps to approximately 200 milliamps.

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136. The method of claim 131, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a peak current that is approximately 200 milliamps to approximately 250 milliamps.

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137. The method of claim 112, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 1 millisecond to approximately 40 milliseconds.

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138. The method of claim 137, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 1 millisecond to approximately 10 milliseconds.

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139. The method of claim 137, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 10 milliseconds to approximately 20 milliseconds.

140. The method of claim 137, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 20 milliseconds to approximately 30 milliseconds.

141. The method of claim 137, wherein the anti-tachycardia pacing energy comprises a monophasic waveform having a pulse width that is approximately 30 milliseconds to approximately 40 milliseconds.

142. The method of claim 112, wherein the anti-tachycardia pacing energy comprises a monophasic waveform that is either positive or negative in polarity.

143. The method of claim 112, wherein the anti-tachycardia pacing energy comprises a monophasic waveform that is provided at a rate of approximately 100 to approximately 350 stimuli/minute.

144. The method of claim 143, wherein the monophasic waveform is provided after a patient's

heart rate is equal or less than approximately 100  
beats/minute.

145. The method of claim 144, wherein the  
5 monophasic waveform is provided after a patient's  
heart rate is associated with a monomorphic ECG  
pattern.

146. The method of claim 112, wherein the lead  
10 system comprises an electrode located proximate the  
sternum and anterior portion of the patient's heart.

147. The method of claim 112, wherein the anti-  
tachycardia pacing energy comprises burst pacing.

148. The method of claim 112, wherein the anti-  
tachycardia pacing energy comprises ramp pacing.

149. The power supply of claim 1, wherein the  
20 battery subsystem and the capacitor system provide a  
sufficient voltage to provide an anti-tachycardia pacing  
energy comprising an approximately constant current.